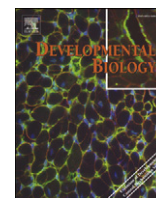


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## Education Hands-on Workshop

### Program/Abstract # 36

#### **Chicks in science! Helping students grok vertebrate embryo morphogenesis, primary literature and biology databases through active and service learning**

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Goal: to improve a teacher's ability to help her students develop research-related skills and develop their lasting understanding of the foundational concepts of embryology and development. In tonight's session we will work through Kathryn Tosney's Origami Embryo, and see first-hand how a simple, active, 3-dimensional modeling

experience that integrates germ layer changes over time can enhance understanding of embryology. Participants will gain confidence useful for teaching with this amazing tool. Students have contacted me 10 years after doing this exercise to share it with their peers or students. We will also work through the new literature-curation effort GEISHA is developing to help students anywhere build their skills for utilizing the primary literature and genomic databases. Bring your laptop. There will be time for discussion with peers interested in active learning over chick snacks.

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